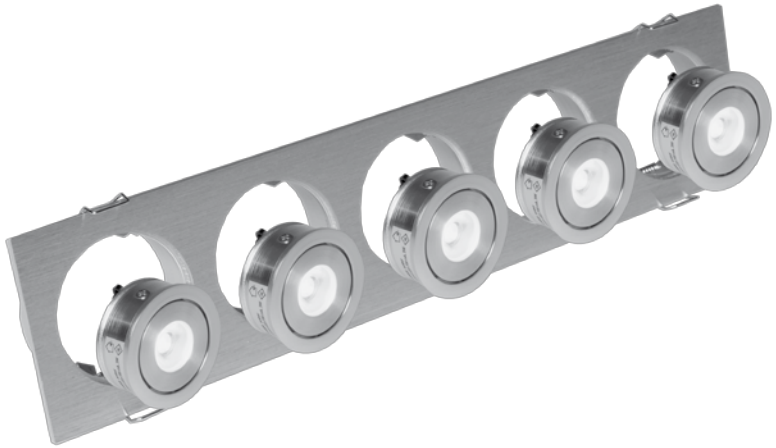
Creative Lighting Solutions



CLS Florence Luxeon III / K2

Version 2.2 November 2010

INTRODUCTION:
The CLS Florence series consists of loose modules with Luxeon III or Luxeon K2 LEDs and various housings. This enables the possibility of making various combinations and makes the lighting options enormous. It is possible to opt for a combination of a 1-module housing with a Luxeon K2 warm white module for the creation of a warm, intimate sphere. Another option could be a 5-module housing with Luxeon III cool white modules in places where high light dispersion is desirable.

Available CLS Florence modules:

- 87129000 CLS Florence module 1xLIII cold white 6700K 700mA
- 87129005 CLS Florence module 1XLIII amber 700mA
- 87129013 CLS Florence module 1xK2 warm white 3150K 700mA
- 87129014 CLS Florence module 1XK2 warm white 3050K 700mA
- 87129017 CLS Florence module 1xLIII red 700mA
- 87129019 CLS Florence module 1xLIII royal blue 700mA
- 87129025 CLS Florence module 1xLIII green 700mA

Included items

The CLS Florence is shipped in one package containing the following items:

- 1 CLS Florence
- 1 user manual

Optional accessories

- 87129060 CLS Florence round ceiling unit alu-brushed 1 hole
- 87129070 CLS Florence square ceiling unit alu-brushed 1 hole
- 87129080 CLS Florence rectangular ceiling unit alu-brushed 2 holes
- 87129090 CLS Florence rectangular ceiling unit alu-brushed 3 holes
- 87129095 CLS Florence rectangular ceiling unit alu-brushed 4 holes
- 87129099 CLS Florence rectangular ceiling unit alu-brushed 5 holes
- 87129150 CLS Florence square ceiling unit alu-brushed 4 holes
- 87129900 CLS SmartConnect, 2-fold junctionbox & shortcircuit connect.
- 87129905 CLS SmartConnect, 6-fold junctionbox & shortcircuit connect.
- 87129911 CLS DMX-1000 to SmartConnect connection set 3x2-fold 1 mtr
- 87129915 CLS SmartConnect short circuit plugs (10pcs)
- 87129948 CLS MT53 LED driver max. 4x700mA 12VA 230-240VAC
- 87129959 CLS SmartConnect extensioncable betw. 2 junctionboxes 5mtr
- 87129990 CLS Florence/MR16 16° lens spot including screw top
- 8714660 CLS DMX-1000 LED driver/dimmer 350-1000mA DMX controllable
- 872005 CLS MT20 LED driver/power supply universal 230-240VAC
- 8720060 CLS MT33 LED driver for max 3pcs 700mA LEDs 220-240VAC
- 872018 CLS MTD43 LED driver 4x700mA/8x350mA 12VA mains dimmable

Note: It is important to read this manual before you install this product.

SAFETY INFORMATION
Warning! This product is for professional use only, not for domestic use.
Read this manual before powering up or installing the CLS Florence. Follow the instructions listed below and observe all warnings in this manual.

Protection from electric shock
- Disconnect the power supply from AC power before installing, dismounting or maintaining the unit.
- Make sure all connectors are connected properly.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the unit to rain or moisture.
- Refer all service to a qualified technician.

Protection from burns and fire
- Provide a clearance of at least 50 mm around the unit.
- Do not install the CLS Florence near a heat source.
- Do not install the CLS Florence in a corrosive, flammable or explosive area.
- Do not modify the CLS Florence, or install other than genuine parts.
- Do not operate the unit if the ambient temperature exceeds 40^{O}C.
- Operate in a well-ventilated area

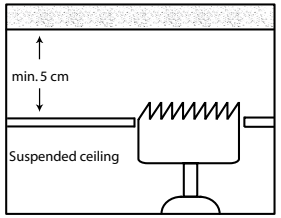
Protection from injury due to falls
- Verify that all covers and mounting hardware are securely fastened.
- Block the access below the work area whenever installing or removing the unit.

INSTALLATION

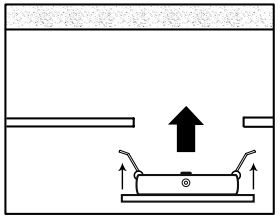
Installing the CLS Florence has never been easier. The product is intended for installation in suspended ceilings. Make sure that the product is mounted on a stable, even and tilt fixed background. A minimum space of 50 mm is needed in the ceiling for ventilation purposes. Do not cover the product.

Indication for the installer: In case you do not install a completely supplied system (with transformer), you are considered a 'manufacturer ' by the low-voltage directive. In this case you are required to ensure the conformity of the whole system and declare it by attaching the **CE-sign**.

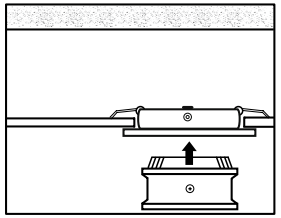
Separate assembly steps
- Mark and cut the opening. (For cut-out marks see pages 4 and 5)



Drill a hole into the ceiling panel. A minimum space of 50 mm is required for ventilation purposes.



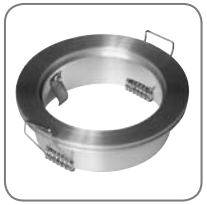
Place the CLS Florence mountingplate in the hole by pressing the springs.



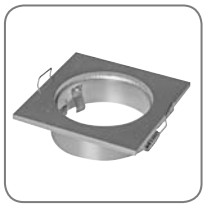
Push the Florence module into the Florence mountingplate.

- Prepare the power supply. Use a suitable CLS driver, see optional accessories, page 2. (For the CLS DMX-1000 see page 6 and for the driver overview see page 7)
- Direct the lighting unit into the opening. You need to use junction box nr. 87129900 or nr. 87129905 for electrical installation.
- You need to make sure that all connections on the junction box are filled. The connections that are not used for an insert module, need to be filled with the short circuit plug that is delivered with the junction box.
- Ensure that the product is tightly secured after installation!
- The product is now ready for use.
- It's not allowed to connect an insert module to the junction box, if there is power on the junction box, the LED will damage permanently. Therefore, be sure to power up the system as the very last step in the installation process.

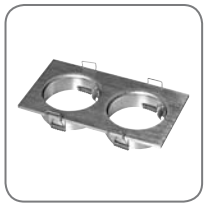
MOUNTINGPLATES



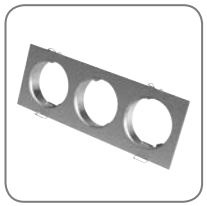
Item:	CLS Florence round mountingplate 1 hole
Item nr:	87129060
Measurements:	ø 60 x 20 mm (øxh)
Cut-out size:	ø 51 mm (øxh)
Housing:	Aluminum brushed



Item:	CLS Florence square mountingplate 1 hole
Item nr:	87129070
Measurements:	20 x 60 x 60 mm (hxwxd)
Cut-out size:	ø 51 mm (øxh)
Housing:	Aluminum brushed



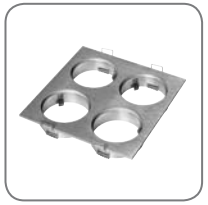
Item: CLS Florence rectangular mountingplate 2 holes
Item nr: 87129080
Measurements: 20 x 112 x 60 mm (hxwxd)
Cut-out size: 101 x 51 mm (wxd)
Housing: Aluminum brushed



Item: CLS Florence rectangular mountingplate 3 holes
Item nr: 87129090
Measurements: 20 x 164 x 60 mm (hxwxd)
Cut-out size: 155 x 51 mm (wxd)
Housing: Aluminum brushed

Item: CLS Florence rectangular mountingplate 4 holes
Item nr: 87129095
Measurements: 20 x 217 x 60 mm (hxwxd)
Cut-out size: 205 x 51 mm (wxd)
Housing: Aluminum brushed

Item: CLS Florence rectangular mountingplate 5 holes
Item nr: 87129099
Measurements: 20 x 267 x 60 mm (hxwxd)
Cut-out size: 257 x 51 mm (wxd)
Housing: Aluminum brushed



Item: CLS Florence square mountingplate 4 holes
Item nr: 87129150
Measurements: 20 x 110 x 110 mm (hxwxd)
Cut-out size: 100 x 102 mm (wxd)
Housing: Aluminum brushed

OPERATION

Operate the product only if it functions correctly. In case of malfunction, switch off immediately and only operate it again after inspection by an electrical specialist. This is the case, when:

- visible damages appear
- the product does not work
- smoke or steam appears
- crackling sounds are heard

ATTENTION!
ELECTRIC SHOCK HAZARD. CAN CAUSE INJURY OR DEATH!

Driver overview

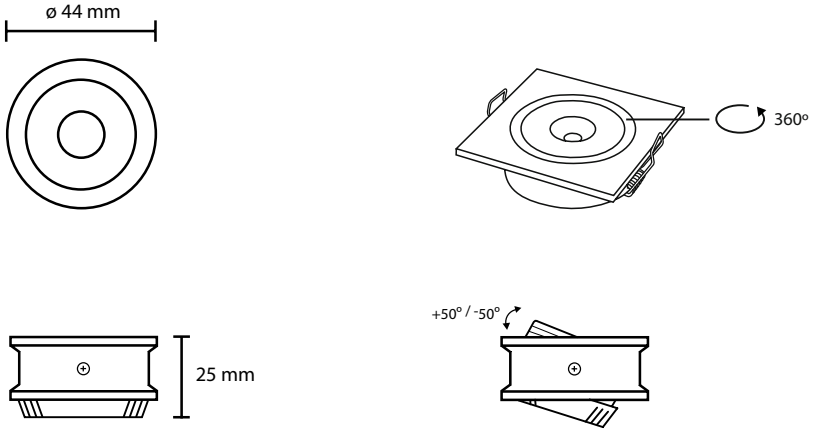
CLS-LED driver overview for maximum amount of connected Luxeon LEDs

Product	Order code	Primary wire connected	Secondary connection box	I 350 mA	II 700 mA	K2 350Ma	K2 700mA	K2 1000 mA	Power	Dimmable
MT-10	872004	No	No	8 pieces	4 pieces	8 pieces	4 pieces	Not Available	24 VA Pf 0,6	No
MT-20	872005	No	No	8 pieces	6 pieces	8 pieces	6 pieces	Not Available	28 VA Pf 0,7	No
MT-24-35	872017	10cm No connector	10cm No connector	3 pieces	3 pieces	3 pieces	3 pieces	Not Available	9 VA Pf 0,7	No
MT-35	872009	No	No	2 x 8 pieces	Not Available	2 x 8 pieces	Not Available	Not Available	35 VA Pf 0,7	Yes
MTD-43	872018	Yes	Yes	8 pieces	4 pieces	8 pieces	4 pieces	Not Available	12 VA Pf 0,9	Mains dimmable phase cut
MT5K2	872023	Yes	Yes	Not Available	Not Available	Not Available	Not Available	4 pieces	20 VA Pf 0,9	With potmeter
MT-53	87129948	Yes	Yes	Not Available	4 pieces	Not Available	4 pieces	Not Available	15VA Pf 0,6	No
DMX-1000	8714660	No	No	6-12 pieces pro channel	6-12 pieces pro channel	6-12 pieces pro channel	6-12 pieces pro channel	6-12 pieces pro channel	Max 210 W	Yes (DMX512)

What to do if the LED shows signs of deficiency or does not work?

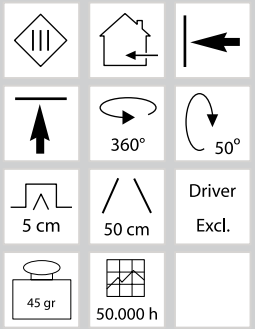
- Under regular usage the LED has an extrordinary long lifetime. In case of first-time damage or failure, contact your local dealer to exchange the LED.

MEASUREMENTS

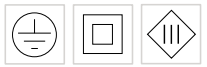


TECHNICAL SPECIFICATIONS

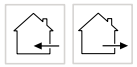
LEDs:	1 x Luxeon III or K2
Available colours:	Luxeon III: cold white, amber, red, royal blue, green Luxeon K2: warm white, 3150K warm white, 3050K
Lenses:	40º, optional 16º
Power supply:	Max. 700 mA
Power consumption:	Max. 3 Watt
Housing:	Aluminum brushed
IP value:	IP40
Cable length:	1 meter
Swivel angle:	+ 50º / -50º, rotate 360º
Measurements:	ø 44 x 25 mm (øxh)
Weight:	45 gr
ambient temperature:	-10 ºC till +40 ºC



LIST OF SYMBOLS



Protection class
One, two or three



Application area
Indoor or outdoor

Application area
Floor, wall or ceiling

Swivel
Fixture is horizontally rotatable, indicated in degrees

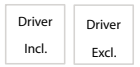
Swivel
Fixture is vertically rotatable, indicated in degrees

Multiple connection
Possiblities on a fixture

Installation depth
In centimeters

Mounting hole
In centimeters

Cable length
Maximum cable attached on the fixture in centimeters



Driver
Inclusive or exclusive

Weight
In gram/kilogram

Pressure
Maximum pressure on the fixture per kg/cm²

Lifespan
Of the light source in hours

Curve
Minimal bending curve in centimeters

LED pitch
Pitch between the LEDs in millimeters

2007 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this manual. No part of this manual may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions to be found on the back of your CLS-LED BV invoice or on our website www.cls-led.com/conditions.pdf